

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12887 - L2 Version 2  
Chandra X-Ray Center

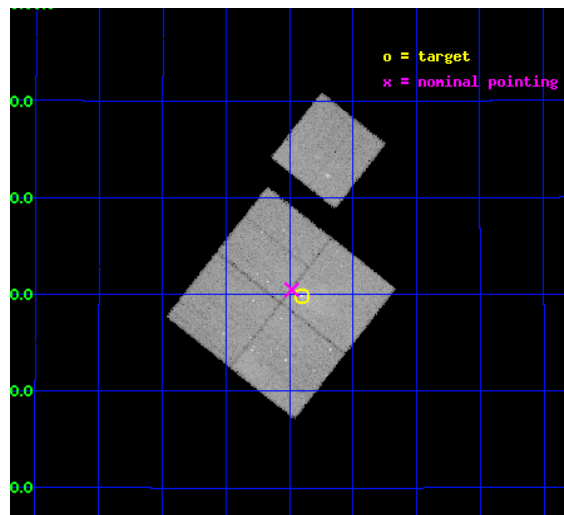
L2 Processing Date : Jul 6 2012

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# 1 Front

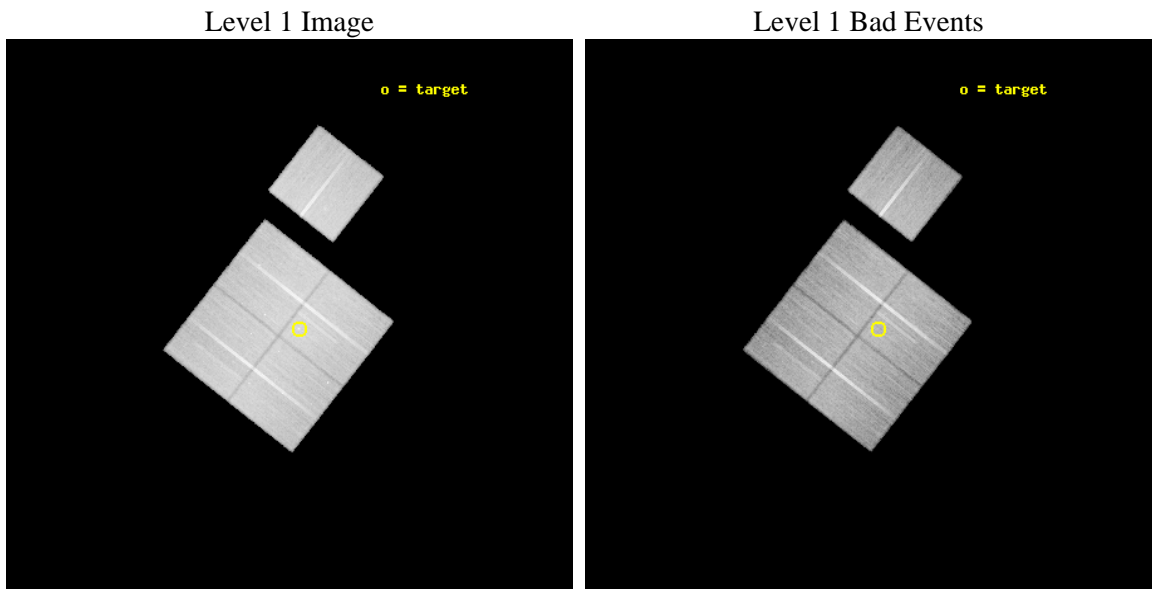
seq_num	801025	Sequence number
obs_id	12887	Observation id
title	Physics of Cluster Mergers - Coma, the Nearest Rich Cluster Merger	&#160
observer	Dr. william forman	Principal investigator
object	NGC4839	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.350417	Observer's specified target RA [deg]
dec_targ	27.496389	Observer's specified target Dec [deg]
ra_nom	194.37031551832	Nominal RA [deg]
dec_nom	27.507986867996	Nominal Dec [deg]
roll_nom	38.213519322759	Nominal Roll [deg]
revision	2	Processing version of data
ontime	44010.536487162	Sum of GTIs [s]
livetime	43435.506427872	Livetime [s]
ontime0	44010.439591825	Sum of GTIs [s]
ontime1	44019.903542817	Sum of GTIs [s]
ontime2	44019.944572806	Sum of GTIs [s]
ontime3	44010.536487162	Sum of GTIs [s]
ontime6	44022.962423146	Sum of GTIs [s]
l2events	200896	Number of level 2 events



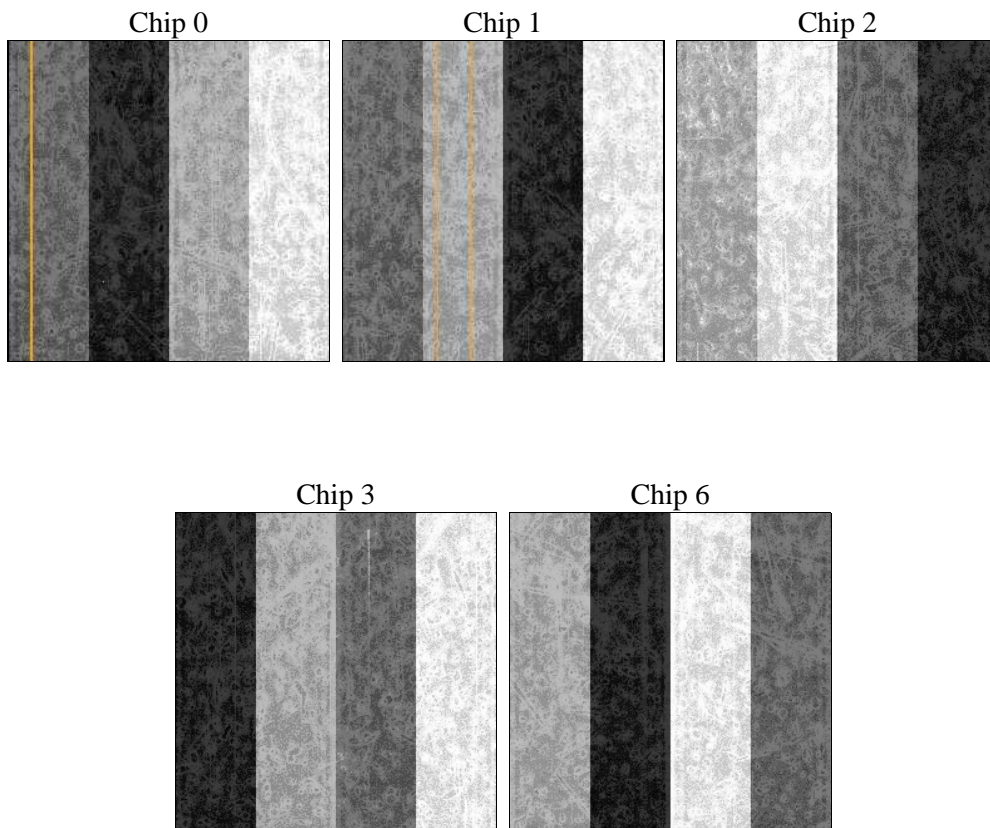
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43968.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	44010.536487162	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime0	44010.439591825	Sum of GTIs [s]
date	2012-07-06T14:53:30	Date and time of file creation	ontime1	44019.903542817	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	44019.944572806	Sum of GTIs [s]
			ontime3	44010.536487162	Sum of GTIs [s]
			ontime6	44022.962423146	Sum of GTIs [s]
			l1events	1596815	Number of level 1 events

### 2.1.4 Events

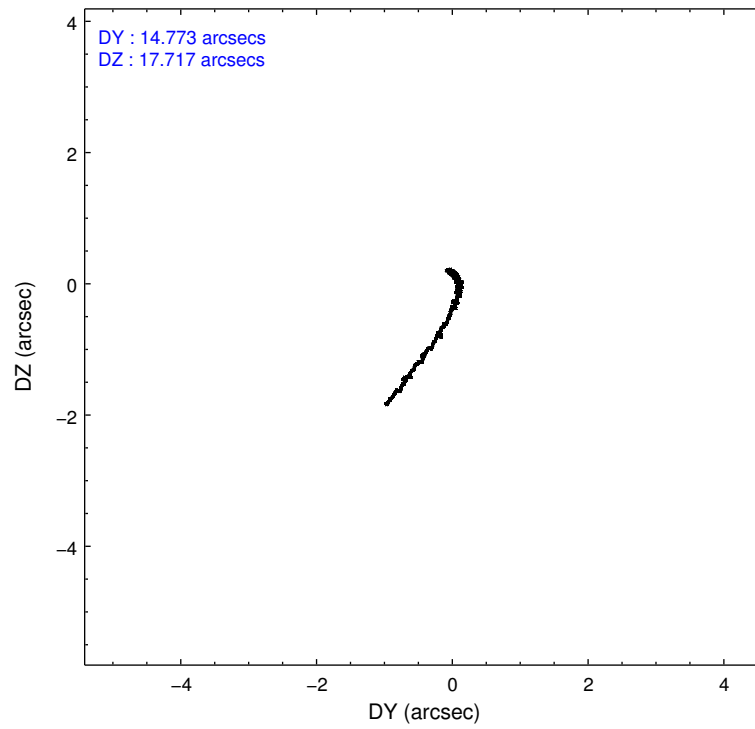
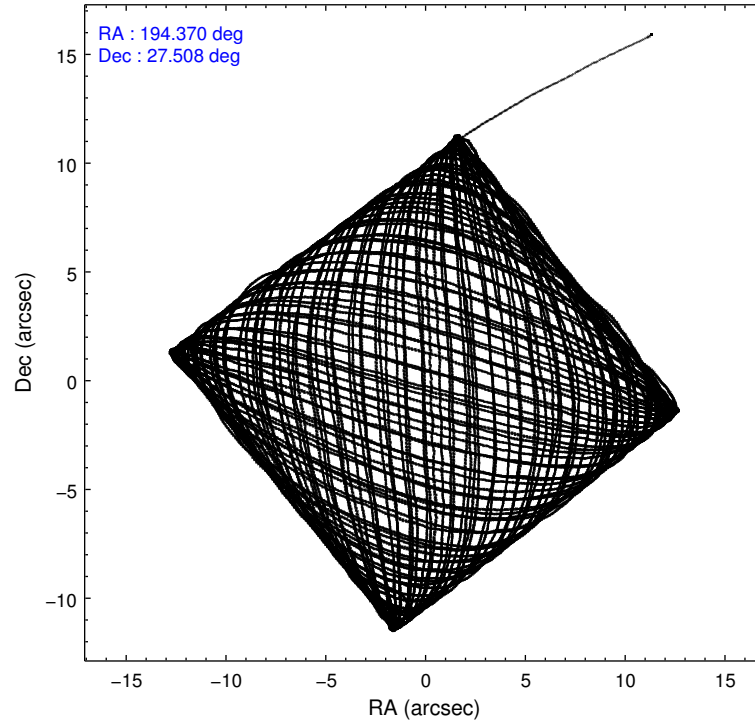
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	298034	307334	332103	335963	323381
rejected events	253964	257471	285207	285369	282311
rejected %	85%	83%	85%	84%	87%

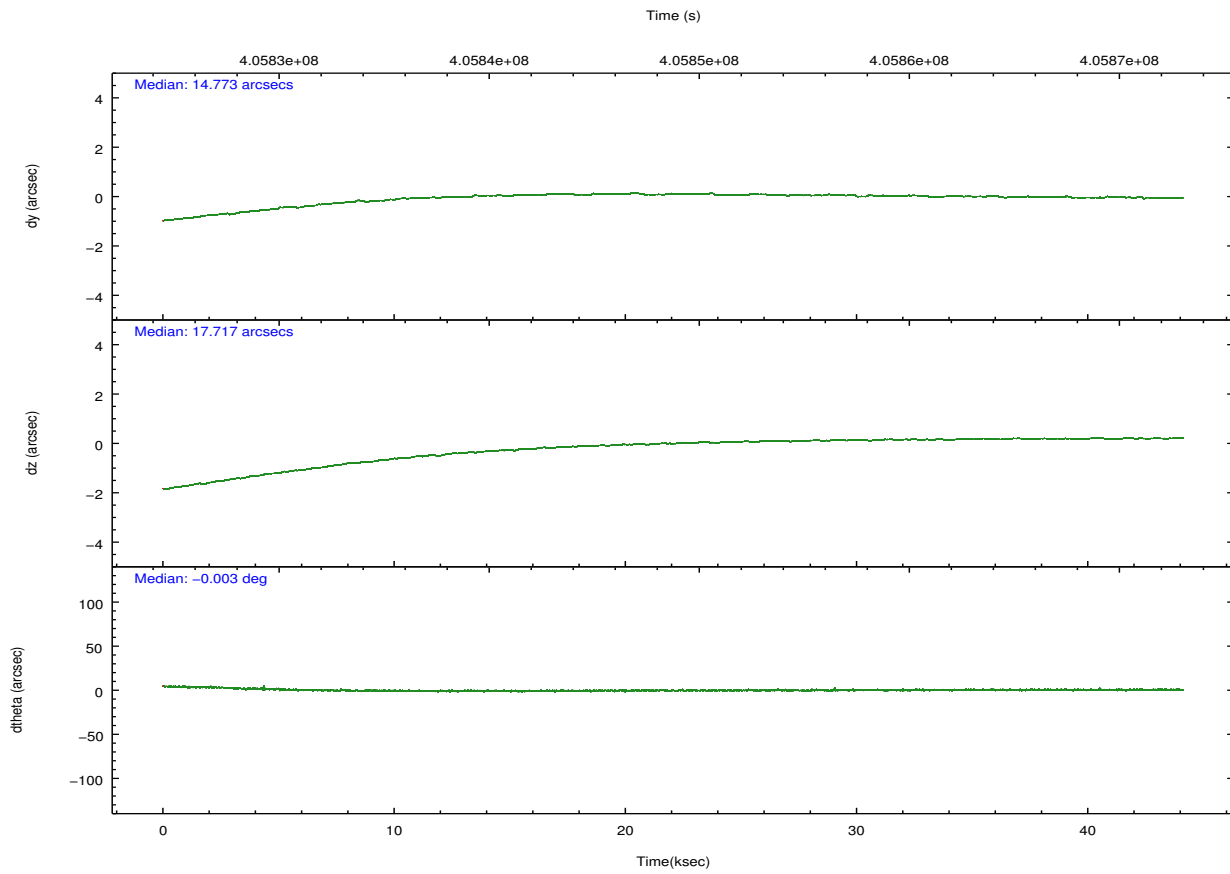
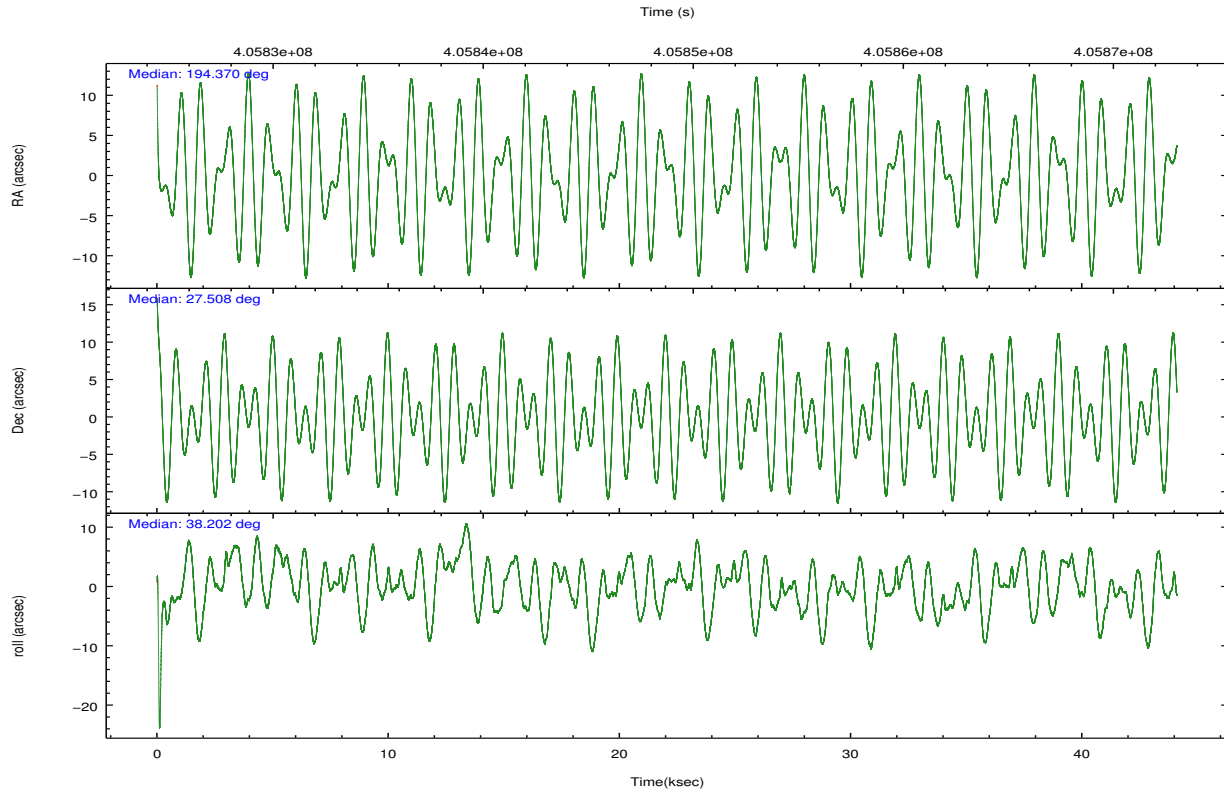
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	19487	22432	22212	26052	17020
	6%	7%	6%	7%	5%
grade 1 events	211	185	246	278	207
	0%	0%	0%	0%	0%
grade 2 events	9583	10430	9844	9251	8461
	3%	3%	2%	2%	2%
grade 3 events	3978	4330	4003	4112	3817
	1%	1%	1%	1%	1%
grade 4 events	3870	4214	3887	3973	3805
	1%	1%	1%	1%	1%
grade 5 events	13184	14186	12551	14800	14261
	4%	4%	3%	4%	4%
grade 6 events	7154	8461	6952	7209	7969
	2%	2%	2%	2%	2%
grade 7 events	240567	243096	272408	270288	267841
	80%	79%	82%	80%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	194.358926	194.3703155183203	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.482409	27.50798686799591	Alternating exposures requested	N	N
[deg] Pointing Roll	38.010081	38.21351932275934	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-230.592463	-230.5928849366707			
[mm] SIM translation stage offset	-3	-2.999568066258945			
[s] Observation start time (MET)	405826835.184000	405825564.33308			
Observation start date	2010-11-11T01:39:29	2010-11-11T01:19:24			
[s] Observation end time (MET)	405870803.184000	405871971.72297			
Observation end date	2010-11-11T13:52:17	2010-11-11T14:12:51			
Read mode	TIMED	TIMED			

## 2.3 Aspect



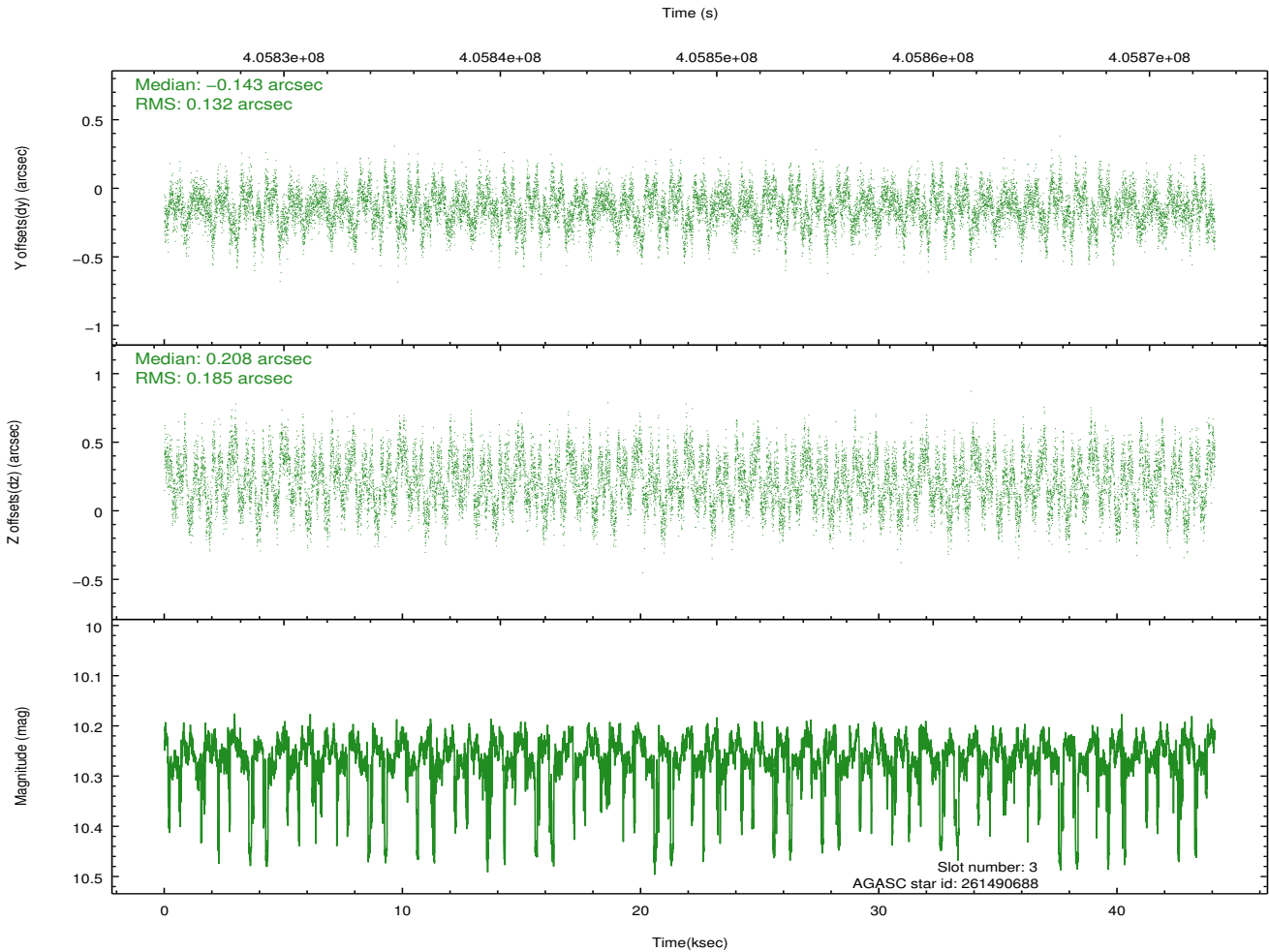
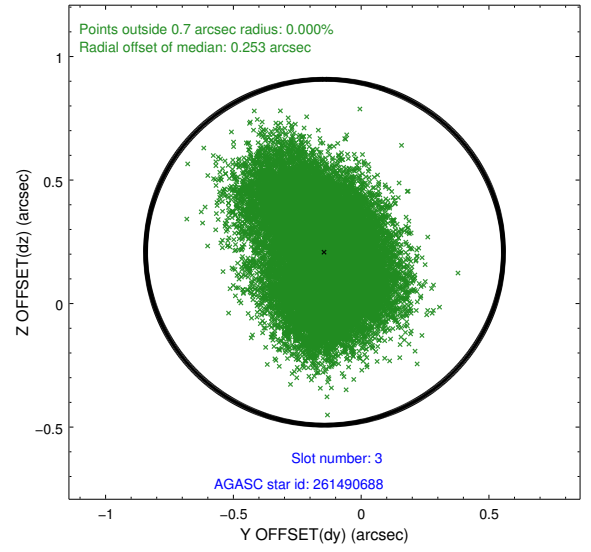
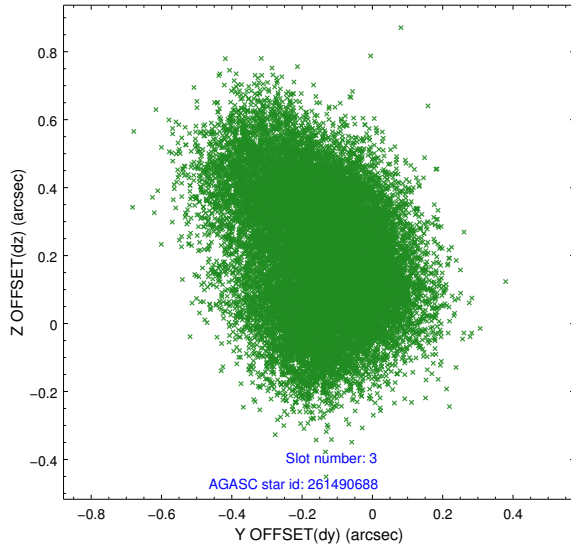


### Slot Statistics

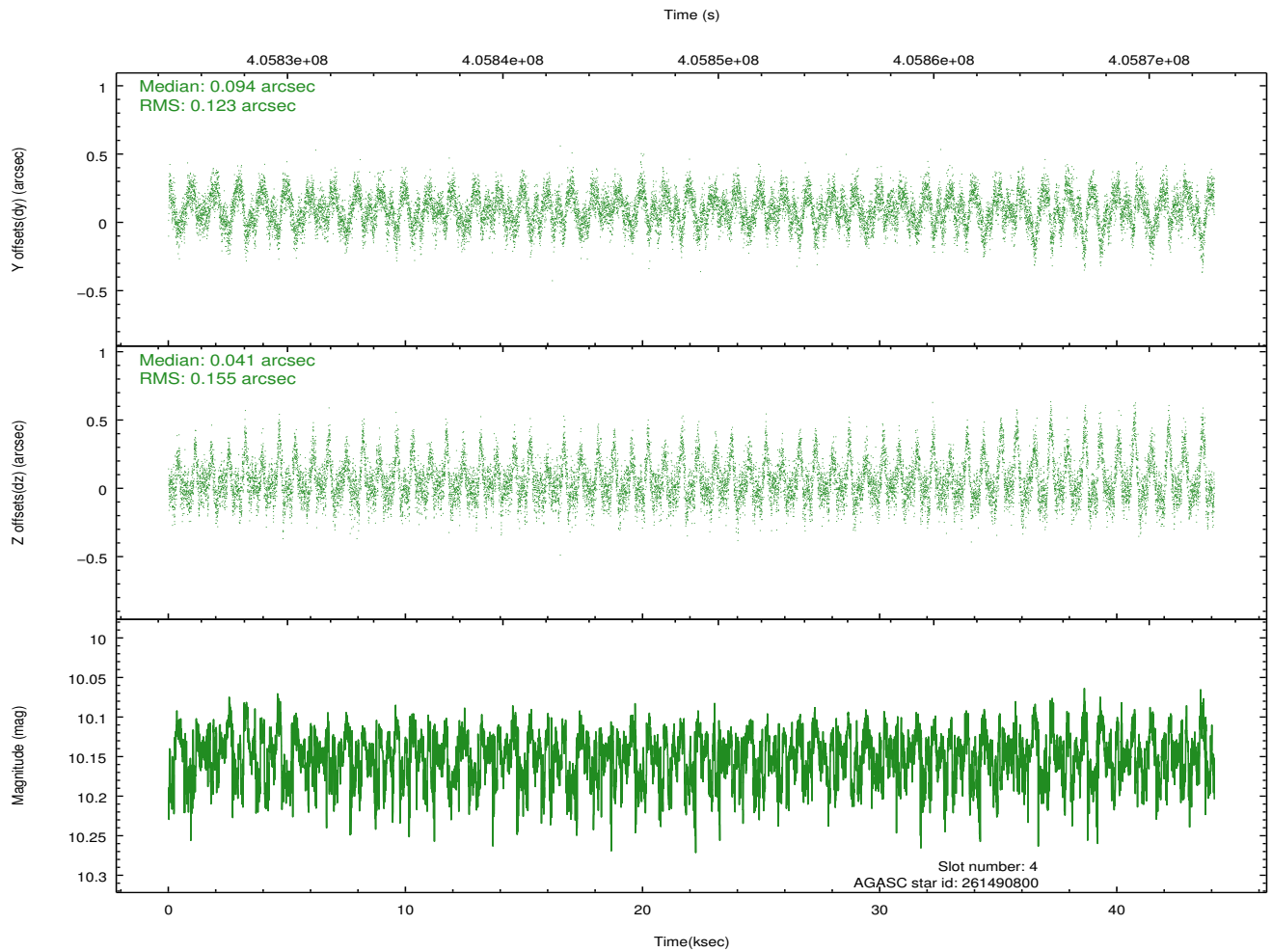
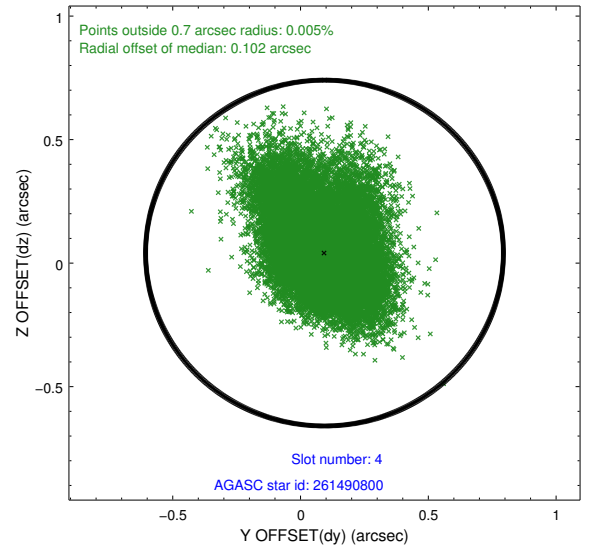
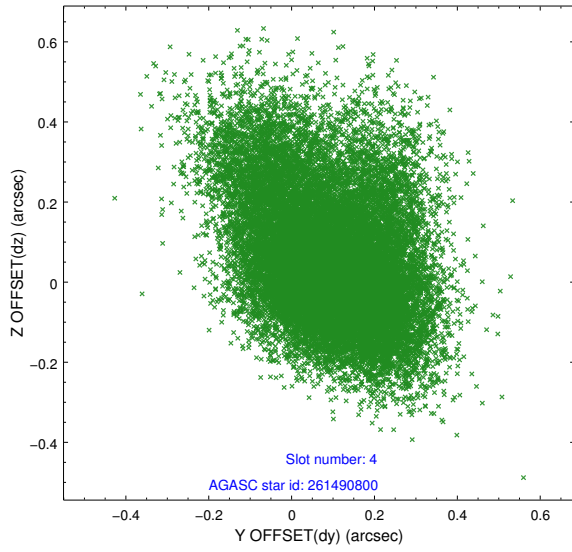
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	10758	0.040	0.011	0.014	0.028	0.000000	0.000000	924.79	-902.59
1	FID	ACIS-I-5	6.98	10758	-0.217	0.049	0.007	0.027	0.000000	0.000000	-1823.62	994.86
2	FID	ACIS-I-6	7.00	10758	0.085	0.011	0.013	0.034	0.000000	0.000000	390.32	1639.38
3	GUIDE	261490688	10.26	21419	-0.143	0.208	0.244	0.388	194.649982	27.195247	98.74	-1387.06
4	GUIDE	261490800	10.15	21447	0.094	0.041	0.203	0.364	195.029641	27.224508	1124.13	-2048.35
5	GUIDE	261502568	9.37	21492	0.021	0.038	0.131	0.212	193.527777	27.676053	-1653.20	2187.93
6	GUIDE	261503592	7.87	21509	0.122	-0.222	0.087	0.145	193.784432	27.766358	-810.52	1935.14
7	GUIDE	261505232	9.77	21488	-0.084	-0.074	0.170	0.278	194.216553	27.802521	352.26	1186.64

## 2.4 Star Slots

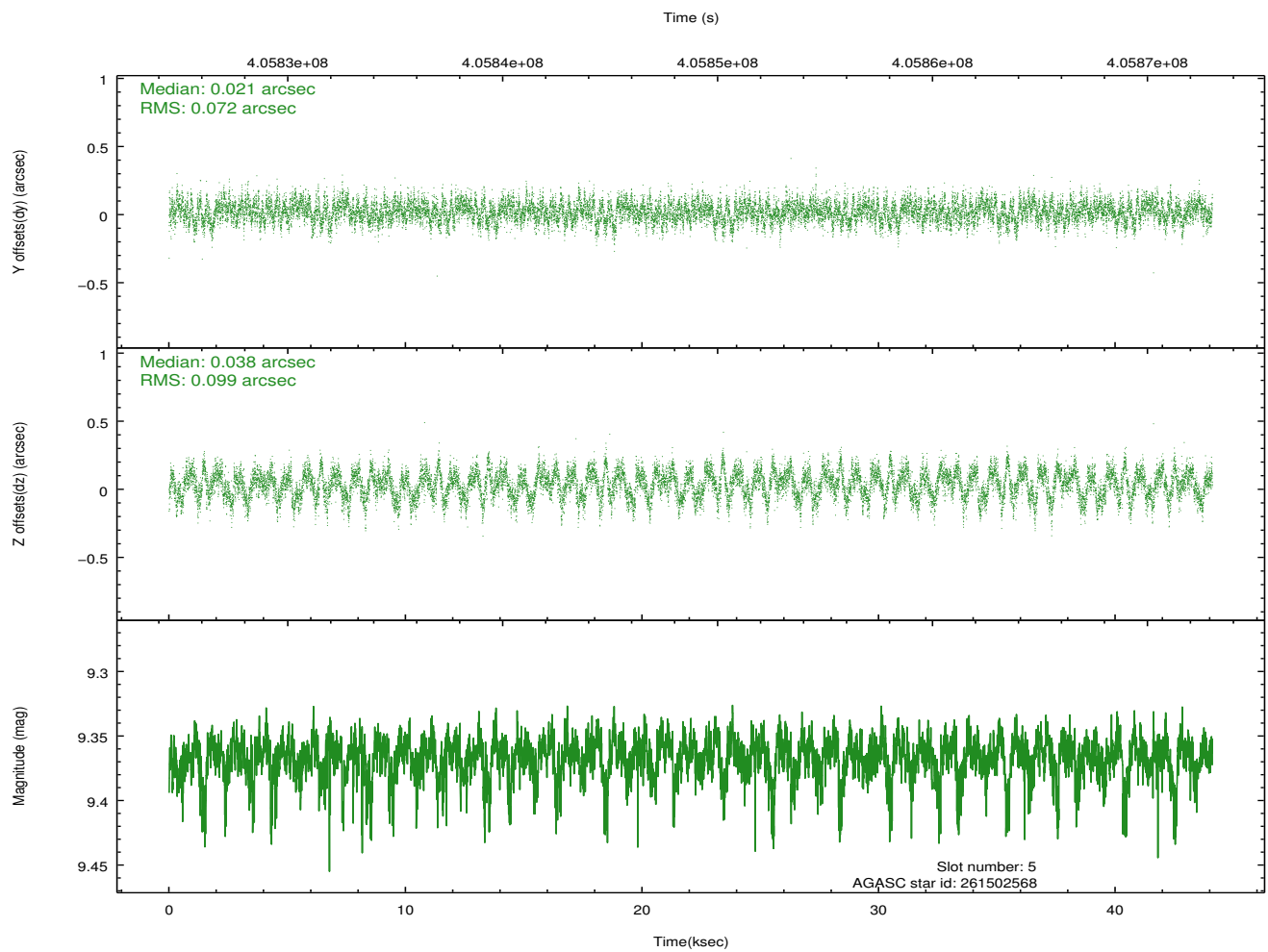
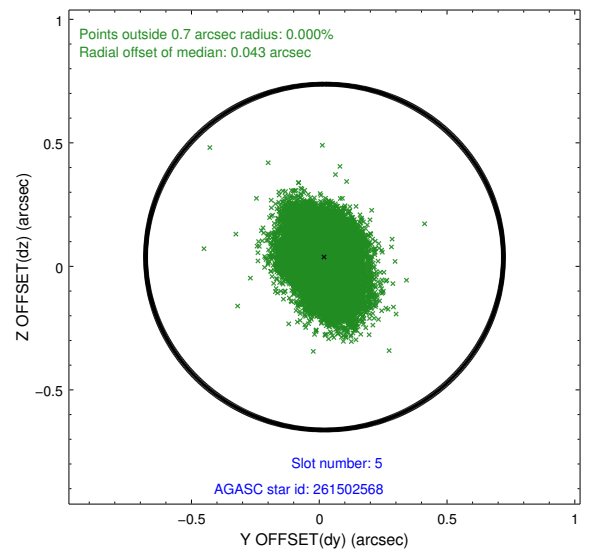
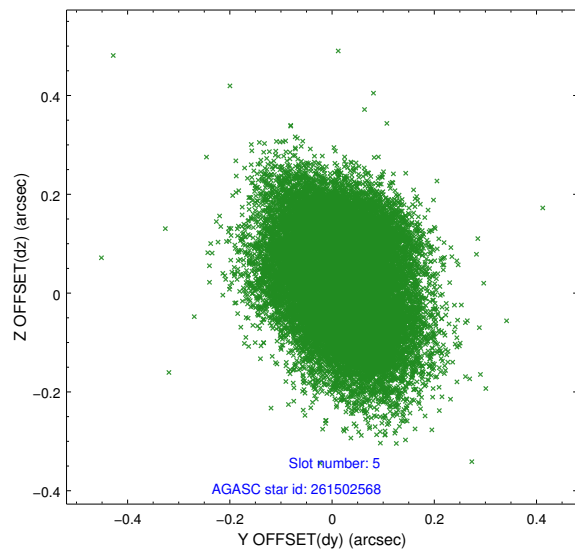
### 2.4.1 Slot 3



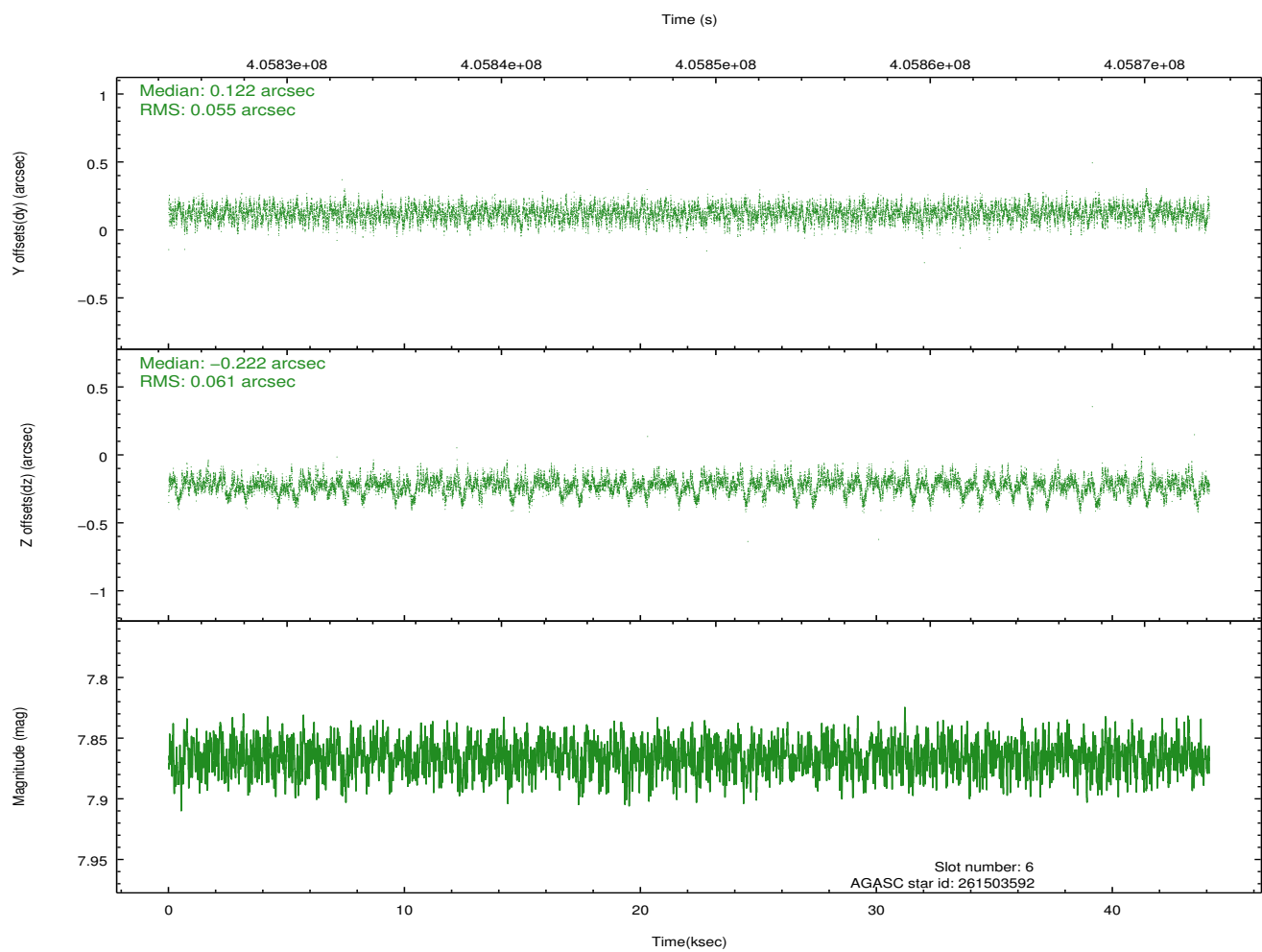
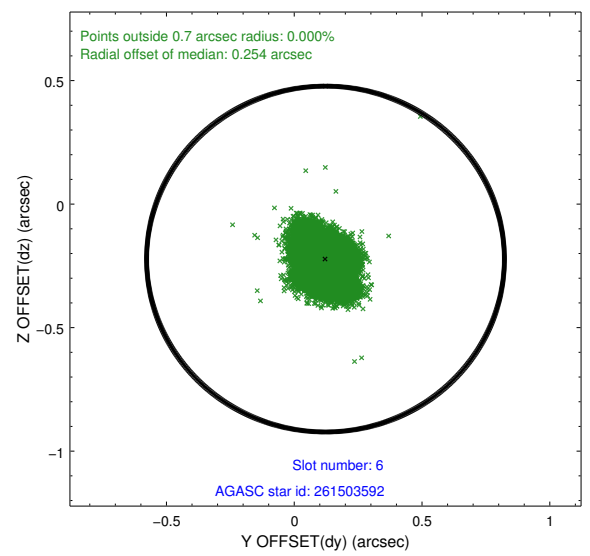
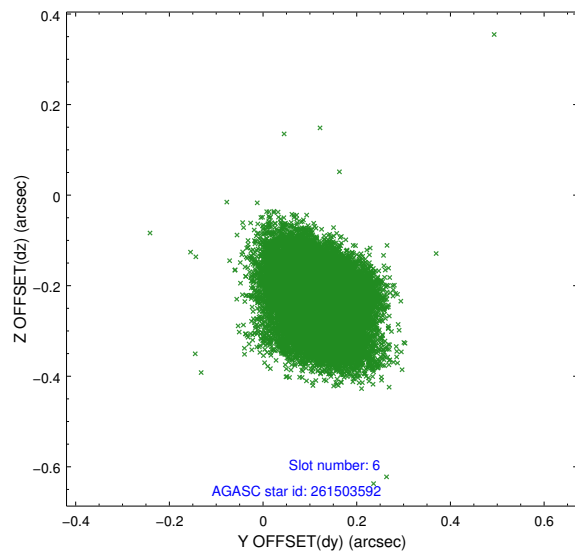
## 2.4.2 Slot 4



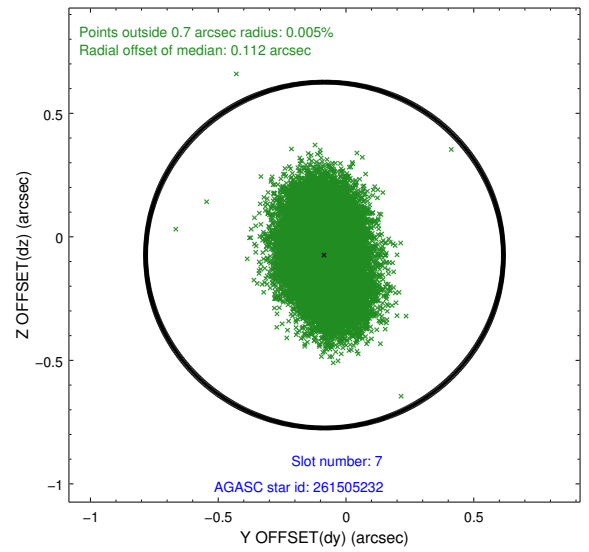
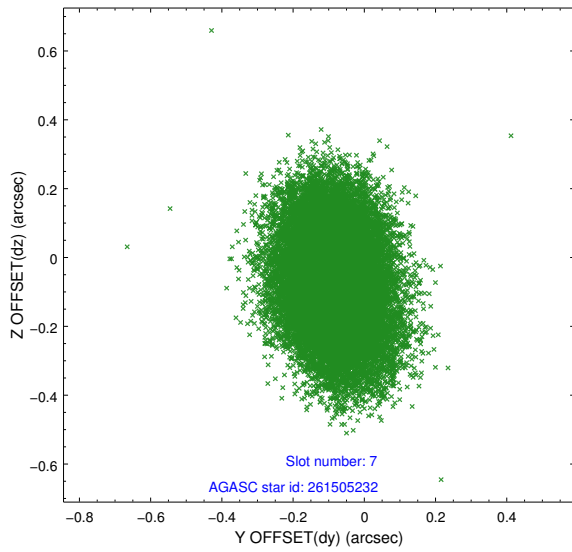
### 2.4.3 Slot 5



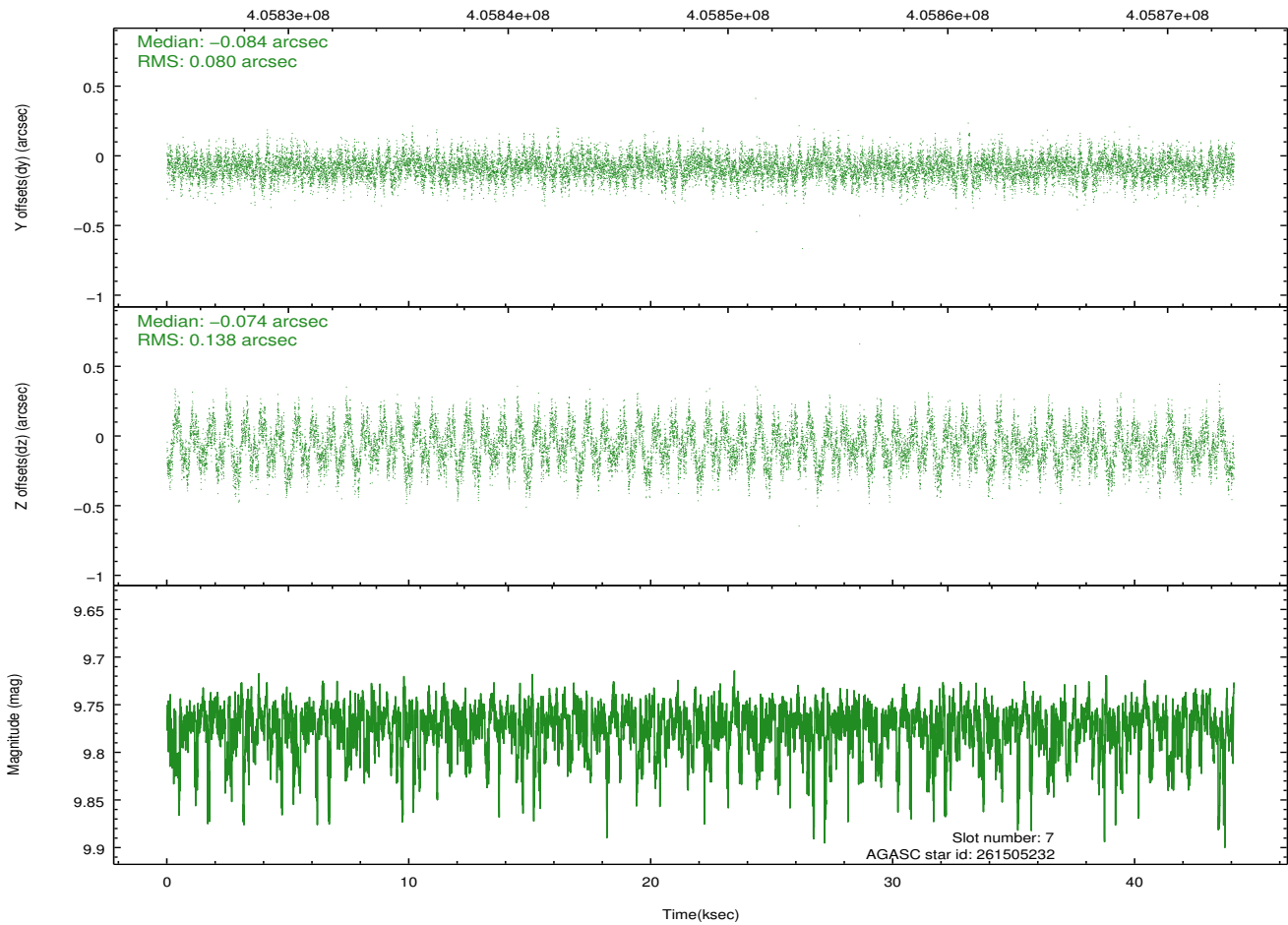
## 2.4.4 Slot 6



## 2.4.5 Slot 7

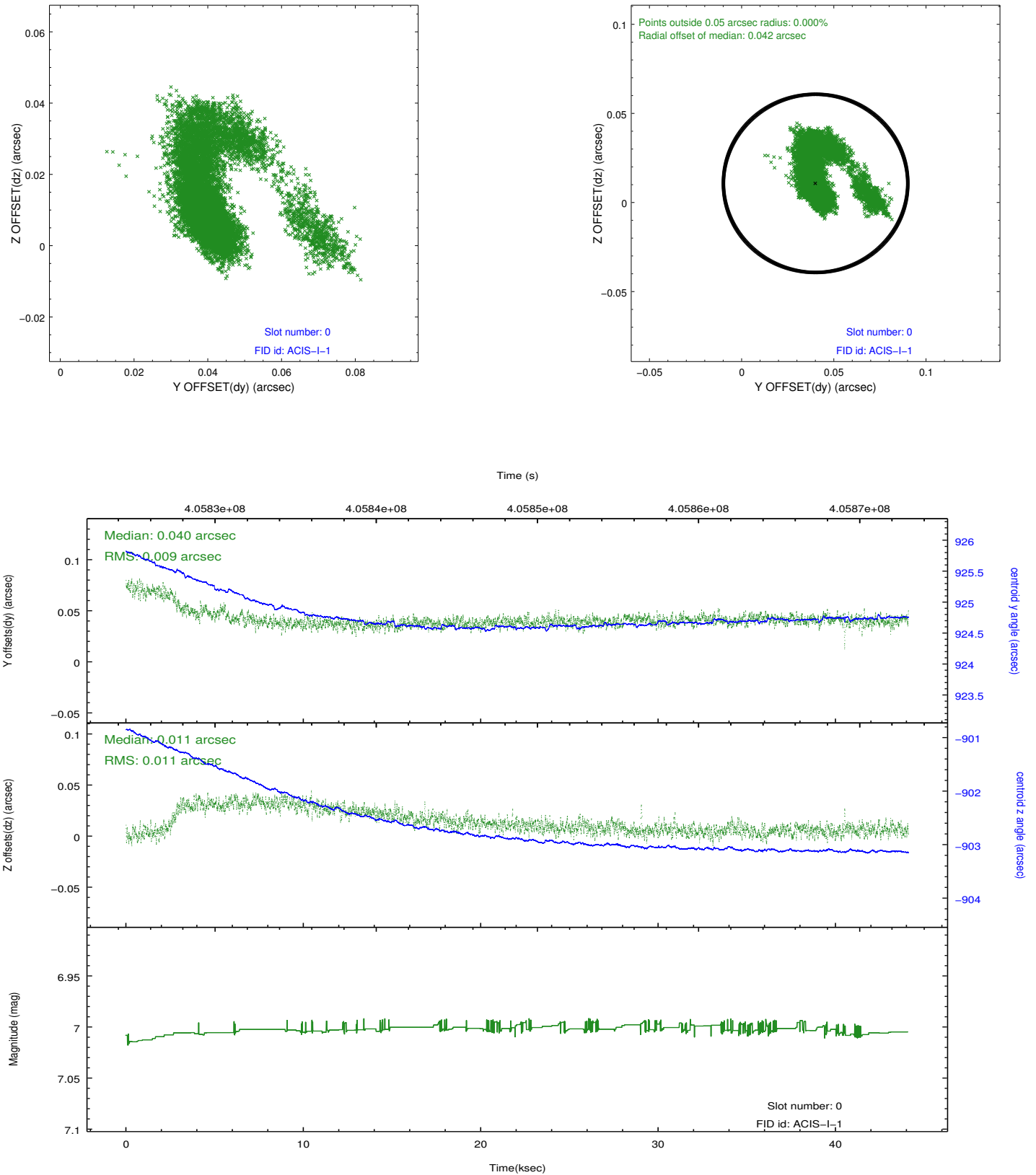


Time (s)

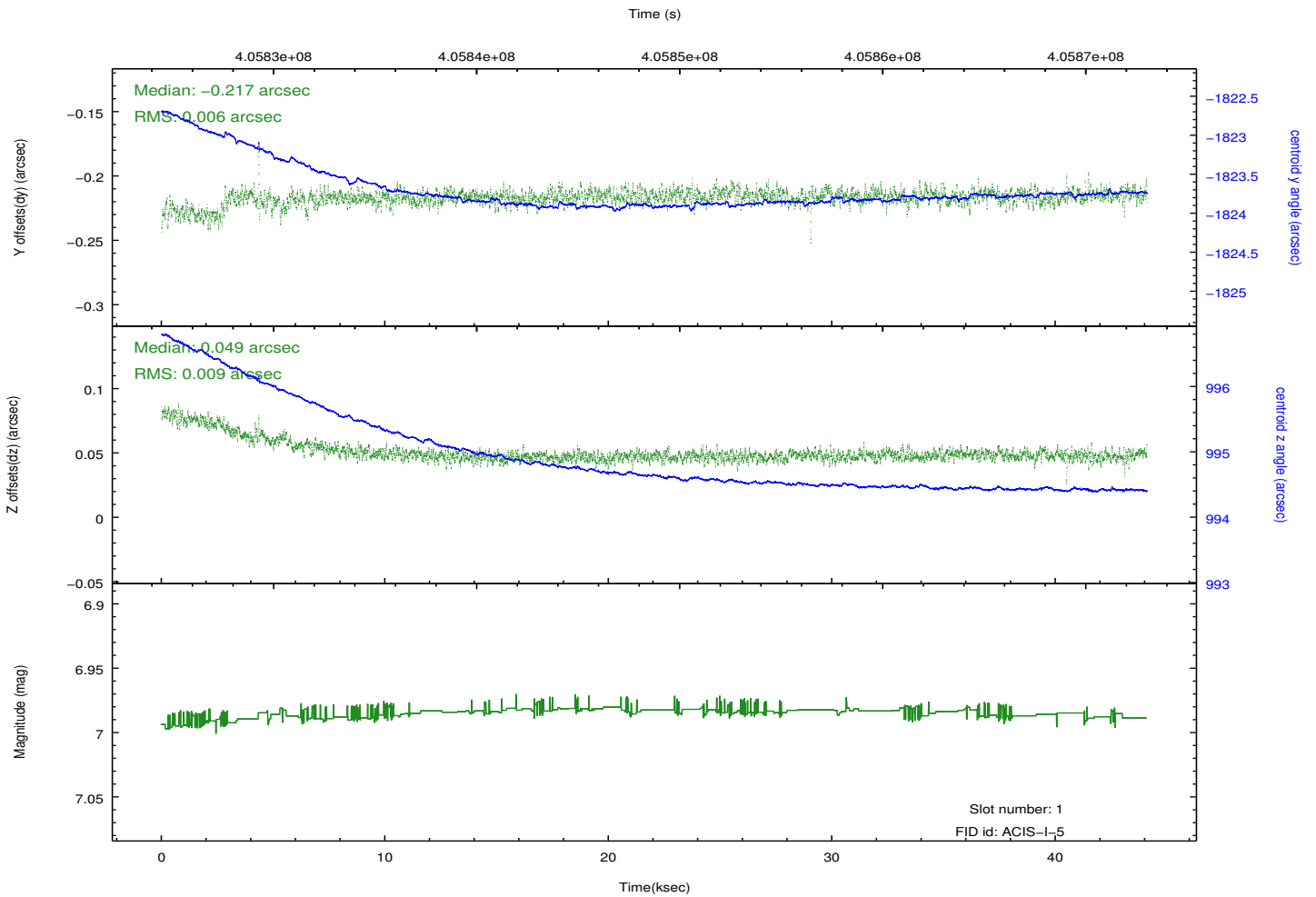
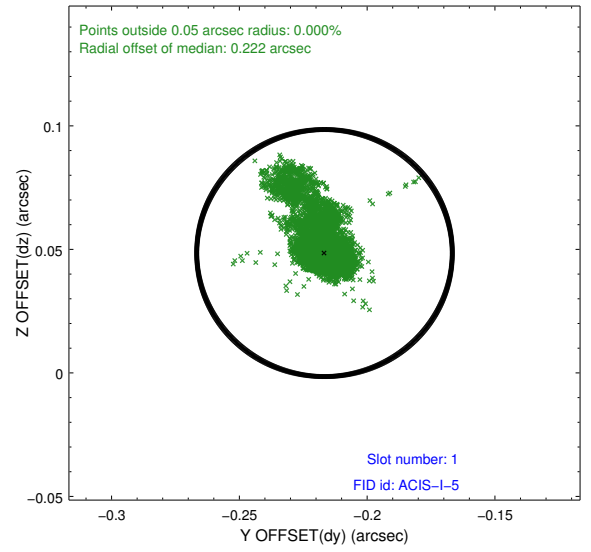
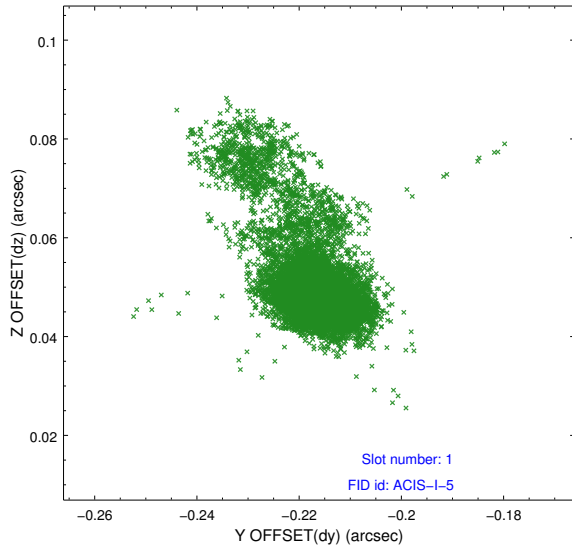


## 2.5 FID Slots

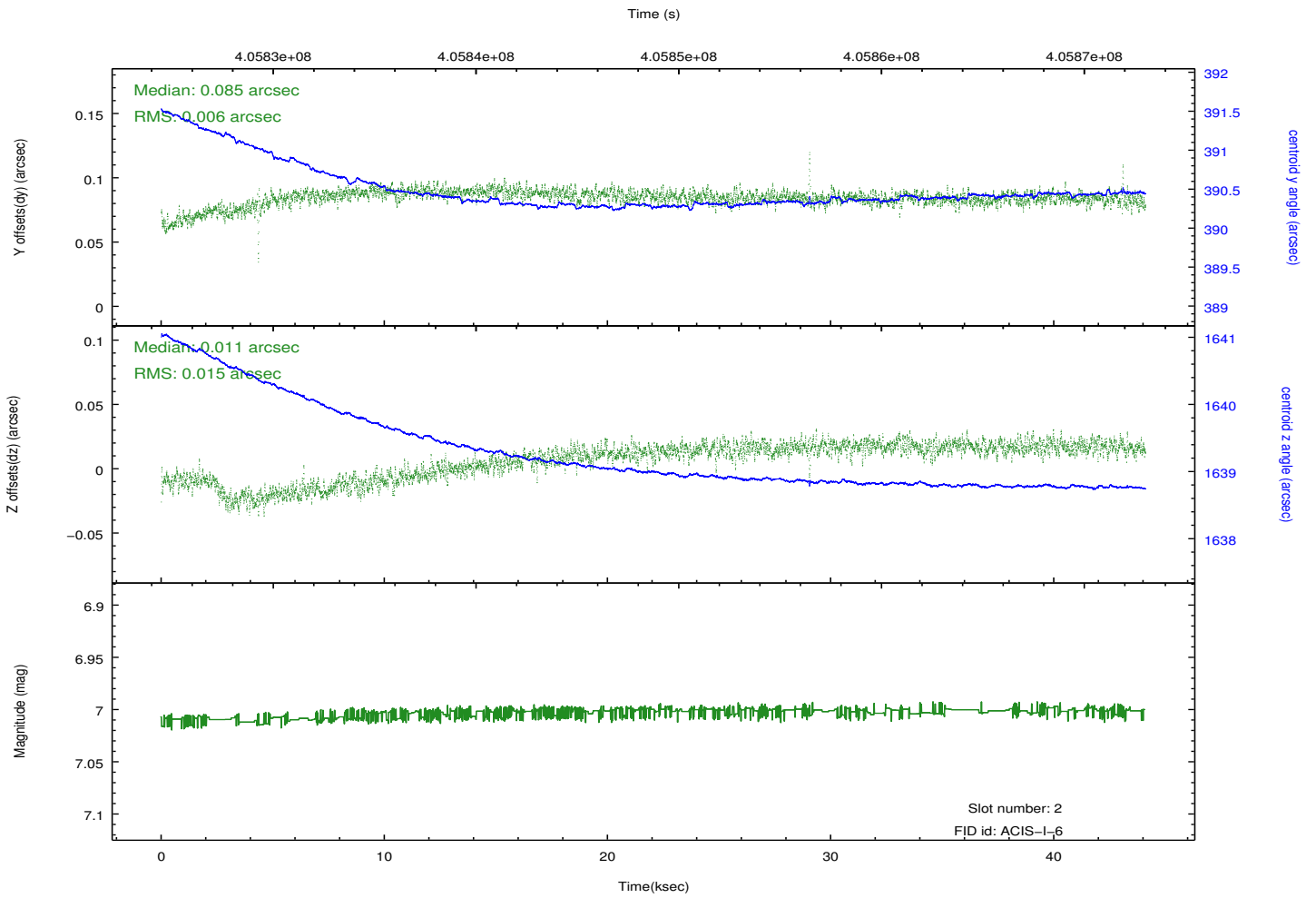
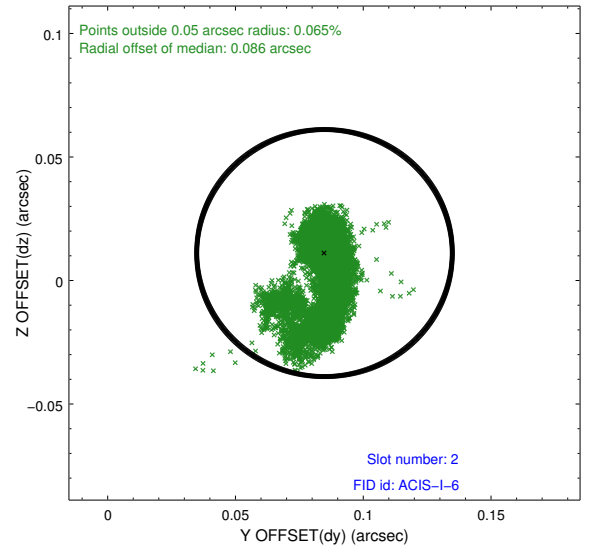
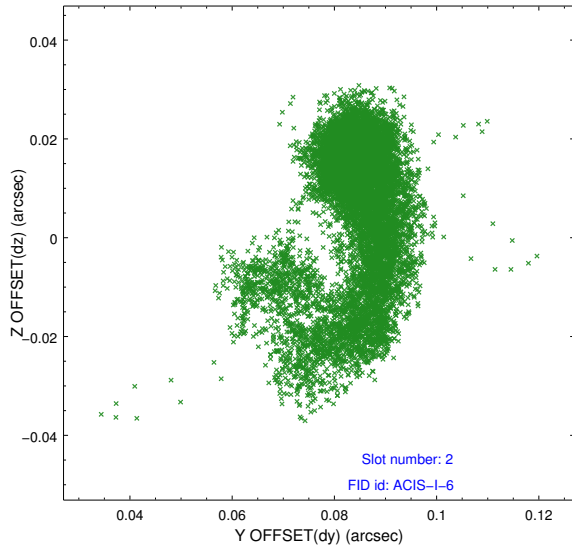
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.010536487162

## A.2 Comments